AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method for examining foreign matters in through holes in a work piece, ~~characterized in that~~ comprising:

passing light ~~passing~~ through a plurality of through holes having a uniform size ~~is simultaneously~~ to ~~taken~~ take ~~as~~ image data[[,]];

initially counting a number of light receiving regions that correspond~~ing~~ to the imaged respective through holes to determine a number of regions~~, each being treated as a mass, is initially counted,~~; ~~and~~

determining whether the number of regions for the work piece concurs with a specified value;

comparing, if the number of regions for the work piece concurs with the specified value, a difference in area between adjacent light receiving regions; and

~~a process to determine~~ determining a presence or absence of foreign matters ~~is conducted~~ in the through holes depending on whether the difference in area is greater than a specified difference in area ~~by mutually comparing areas of adjacent ones of the light receiving regions for only a work piece with a counted value of light receiving regions being concurred with a specified value~~.

2. (Original) A method for examining foreign matters in through holes according to claim 1, wherein the counting of light receiving regions is conducted only for those of the extracted light receiving regions whose area values are within a specified range.

3. (Previously Presented) A method for examining foreign matters in through holes according to claim 1, wherein, when the number of light receiving regions counted in the step of counting the number of light receiving regions does not concur with a specified value, the examination is ended.

4. (Currently Amended) A method for examining foreign matters in through holes in a work piece, ~~characterized in that~~ comprising:

passing light ~~passing~~ through a plurality of through holes having a uniform size ~~is simultaneously taken as~~ to take image data[[,]];

counting a number of light receiving regions that correspond~~ing~~ to the imaged respective through holes ~~is initially counted~~ to determine a number of regions subject to the extracted light receiving regions having area values being within a specified range[[,]];

determining whether the number of regions for the work piece concurs with a specified value;

comparing, if the number of regions for the work piece concurs with the specified value, a difference in area between adjacent light receiving regions;

~~a process to determine~~ determining a presence or absence of foreign matters depending on whether the difference in area is greater than a specified difference in area ~~is performed by~~

~~mutually comparing adjacent ones of the light receiving regions for only a work piece with a light receiving region count value being concurred with a specified value~~[[,]]; and

ending the examination ~~is ended~~ when the number of the light receiving regions counted in the step of counting the number of light receiving region does not concur with [[a]] the specified value.

5. (Currently Amended) A method for examining foreign matters in through holes in a work piece, ~~characterized in that~~ comprising:

passing light ~~passing~~ through a plurality of through holes having a uniform size ~~is simultaneously taken as~~ to take image data[[,]];

~~the image data is divided~~ dividing the image data into groups and reading the image data for each examination region[[,]];

initially counting the number of imaged light receiving regions that correspond~~ing~~ to the respective through holes to determine a number of regions in the examination region ~~is initially counted~~[[,]]; ~~and~~

determining whether the number of regions for the work piece concurs with a specified value;

comparing, if the number of regions for the work piece concurs with the specified value, a difference in area between adjacent light receiving regions; and

~~a process to determine~~ determining a presence or absence of foreign matters depending on whether the difference in area is greater than a specified difference in area ~~is performed by mutually comparing areas of adjacent ones of the light receiving regions for only a work piece with a counted number of light receiving regions being concurred with a set value~~.

6. (Previously Presented) A method for examining foreign matters in through holes according to claim 1, wherein an image is taken with an imaging focal point of a sensor camera being shifted from a surface of the work piece, such that the image is taken with an image area of light passing through the through hole being expanded.

7. (Previously Presented) A method for examining foreign matters in through holes according to claim 4, wherein an image is taken with an imaging focal point of a sensor camera being shifted from a surface of the work piece, such that the image is taken with an image area of light passing through the through hole being expanded.

8. (Previously Presented) A method for examining foreign matters in through holes according to claim 5, wherein an image is taken with an imaging focal point of a sensor camera being shifted from a surface of the work piece, such that the image is taken with an image area of light passing through the through hole being expanded.